EXPLORING THE USE OF SPOTIFY ON ENHANCING EFL STUDENTS' VOCABULARY

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Abstract: Vocabulary acquisition is essential for EFL students to develop their language skills. However, traditional vocabulary learning methods often fail to engage students effectively. This study investigates the use of Spotify as a tool to enhance EFL students' vocabulary mastery in a vocational high school context. A mixed-method approach was used, combining questionnaires and semi-structured interviews with two classes of students from the hospitality department. The study explores how students use Spotify, particularly song lyrics, to learn vocabulary, their perceptions of its effectiveness, and the challenges they face. Findings show that students find Spotify engaging and helpful in learning new words, especially through repeated listening and contextual understanding. However, challenges include slang use and difficulty in understanding some lyrics. The study concludes that Spotify can serve as a valuable supplementary tool for vocabulary learning and offers practical insights for integrating music-based learning in EFL classrooms.

Keywords: A Mixed-Methods Study, EFL Students, Spotify, Vocabulary Acquisition

INTRODUCTION

Vocabulary acquisition is a crucial aspect of language learning, and it is particularly important for EFL students who are learning English as a second language. According to Fauzi et al. (2023), English language learners focus on vocabulary acquisition when they learn English. In addition, vocabulary is a key part of learning a foreign language and is closely linked to other skills like listening, speaking, reading, and writing (Nguyen, 2021). EFL students need to develop a strong vocabulary base to effectively communicate in English and to understand various texts. Sinaga et al. (2020) mention some types of approaches, techniques, activities, and exercises that have been introduced to help teach vocabulary. However, vocabulary acquisition can be a challenging task, especially for students who are not exposed to English language use in their daily lives. Therefore, teaching vocabulary should not only consist of teaching specific words but also focus on giving students the tools they need to grow their vocabulary on their own (Tampubolon & Sitorus, 2023).

Along with the times, fun and enjoyable learning is more attractive to students. Incorporating fun activities into the education system makes teaching and learning more interesting and student-centered (Nabilah Mokhtar et al., 2023). Learning can also be fun when done through music technology using songs. Lam Kieu et al. (2021) stated technology helps education grow, and modern tools make it possible for people to reach great new accomplishments in learning, especially in learning English. Sarabi & Ututalum (2024) also stated that integrating 21st-century skills as a transformative teaching method is essential because these skills play a crucial role in enhancing students' impact and exposure in the modern world. The use of technology, especially in music, such as Spotify, can provide EFL students with an authentic and engaging way to learn new vocabulary and improve their language skills.

Spotify, founded in 2006, is a digital music and podcast platform that provides access to millions of songs from artists around the world (Septiara & Hamzah, 2023). With Spotify, users can listen to music, podcasts, and audiobooks on different devices like smartphones, tablets, computers, and TVs (Delwér, 2023). Spotify's lyrics feature, in particular, offers a unique opportunity for students to engage with English songs and improve their vocabulary skills. Moreover, Rohmah & Indah (2021) stated when students explore song lyrics, they are not just listening to music, they are actively interacting with the language, analyzing vocabulary, and understanding context, which enhances their language skills in a way that is both enjoyable and effective. This innovative approach harnesses the power of music to enhance language learning, as song lyrics provide a rich source of vocabulary. This feature has proven to be very effective in improving students' vocabulary acquisition, as it provides an interactive and engaging way to learn new words more easily (Nureani & Warni, 2023). Therefore, this study aims to investigate the effectiveness of using Spotify in helping EFL students improve their vocabulary.

Several studies related to the use of English songs through Spotify have been conducted. According to Adnyani & Dewi (2020) found that the correlated song lyrics and vocabulary bring an advantage in teaching English. Hasanah & Suryanto (2024) also states in their research results that using Spotify regularly can help students improve their vocabulary and support their overall English learning experience. Besides, Sitepu et al. (2023) in their research stated that using song lyrics to learn vocabulary gives students a chance to improve their word knowledge and makes them more excited and motivated. Al-Efeshat & Baniabdelrahman (2020) claims that teachers play an essential role in teaching English vocabulary by helping students expand their vocabulary knowledge, while using songs can make the classroom more engaging, as students find listening to songs an effective way to learn by reading and translating the lyrics themselves. However, this current study focuses on Spotify in the mastery of EFL students' vocabulary in a vocational school context. Thus, this study aims to explore students' experiences in using Spotify as part of the English learning process. The benefits of this research include academic contributions in the development of English learning methods, as well as practical benefits for teachers in adopting innovative and fun learning methods.

From the explanation above, it is necessary to conduct a research by exploring how Spotify can enhance EFL students' vocabulary mastery in vocational high school. It was found that students mostly used Spotify. There are many students who like to listen to music when doing assignments and they use the Spotify application. They also learn vocabulary while listening to music on the Spotify application. Focusing on vocabulary enhancement, the study provides that regularly reading song lyrics while listening can help students remember and understand new words better, giving teachers a useful tool for their classes. Additionally, by utilizing music's motivational value, the study shows that Spotify can make learning more enjoyable, potentially increasing student motivation and active participation, both essential for effective language acquisition.

This study aims to examine how Spotify can enhance vocabulary acquisition among EFL students. By employing a mixed-method approach that combines quantitative data through questionnaires and qualitative insights through semi-structured interviews, the study seeks to gain a comprehensive understanding of both the general trends and individual experiences regarding the use of Spotify in language learning. This study involves two classes of EFL students of vocational high school a/t various proficiency levels as participants to ensure a diverse representation. The study explores how students interact with Spotify, focusing on their vocabulary learning strategies, specific preferences, and any challenges they encounter when using this

feature. Additionally, it will analyze how students integrate Spotify into their regular study routines and how it may impact their motivation and engagement in vocabulary acquisition. Thus, the research questions are addressed as follows: 1) How do EFL students perceive on the use of Spotify in enhancing vocabulary acquisition? 2) What is the correlation between the students' perceived use of Spotify and their perceived understanding of vocabulary acquisition? 3) What benefits do EFL students experience when using Spotify in acquiring vocabulary qualitatively? and 4) What challenges do EFL students face when using Spotify in learning vocabulary?

Vocabulary Acquisition: Definitions, Types, and Its Importances

In daily life, language serves as the primary medium for communication, encompassing both spoken and written forms. A fundamental aspect of language proficiency, as emphasized by Richards & Renandya (2022), is vocabulary, which significantly influences the proficiency of speaking, listening, reading, and writing skills. This aligns with Neuman & Dwyer (2009) definition of vocabulary as the essential words required for effective communication, encompassing both expressive and receptive aspects. In other words, vocabulary is understanding the meanings of words (Hiebert & Kamil, 2005). From the definitions given about vocabulary above, it can be said that vocabulary is a basic element of language that someone needs learn in language in order to understand language, use language, and communicate effectively with others. In addition, vocabulary can also affect reading and writing abilities.

According to experts, vocabulary can be classified into two main types, as outlined by (Hiebert & Kamil, 2005). First, productive vocabulary consists of words individuals actively use when expressing ideas verbally or in writing. These words are familiar and commonly used in daily communication. Second, receptive vocabulary refers to words that individuals understand or recognize when listening or reading but may not necessarily use themselves in speaking or writing (Dewi, 2019). These words are typically less familiar and less frequently used by learners.

In contrast, Schmitt (2000) provides a more detailed breakdown of vocabulary into two types, active vocabulary, which is utilized in speaking and writing, and passive vocabulary, which is employed in listening and reading. Listening vocabulary encompasses words understood or recognized during listening activities such as conversations or presentations. Speaking vocabulary includes words used to orally convey information and thoughts in everyday interactions. Reading vocabulary comprises words recognized or understood while reading texts from books, magazines, or the internet. Last, writing vocabulary refers to words selected and employed in written communication to effectively communicate ideas or information. These categorizations offer insights into how vocabulary is utilized across different language skills and contexts.

Regarding its vocabulary importance, it is essential for effective communication and comprehension in both spoken and written language. As a foreign learners of English, having a broad vocabulary is crucial as it aids in developing listening, speaking, reading, and writing skills (Rashid et al., 2022). Even with a solid understanding of grammar, communication can falter without a strong vocabulary (Rashid et al., 2022). This idea is supported by Dewi (2019), who noted that while individuals can say very little with just grammar, they cannot say anything without words. Additionally, a strong vocabulary is vital for reading comprehension, as it enables readers to understand the meaning of unfamiliar words and appreciate written text (Rashid et al., 2022). These points highlight the importance of vocabulary in language learning. A lack of vocabulary can cause significant difficulties for students learning English, as they will struggle to

communicate their ideas effectively. Therefore, vocabulary plays a crucial role in English learning, supporting students in mastering various language skills.

Strategies for Vocabulary Acquisition

Learning vocabulary is an important part of language learning, helping students improve their skills in EFL. To learn vocabulary more effectively, students can use a mix of traditional methods and modern strategies. Integrating traditional techniques, such as rote memorization, with modern strategies, including contextual learning and technology-assisted tools, significantly enhances students' vocabulary application skills (Fengyu, 2023). One of the best ways to learn new words is by being exposed to real-life language. Listening to native speakers and seeing how words are used in context helps students understand both the meanings and correct uses of words. Exposure to native speakers, such as through listening to English lectures, provides students with valuable opportunities to acquire new vocabulary in authentic contexts (Reynolds et al., 2022). This way of learning helps students remember new words because they can figure out the meaning of unfamiliar words based on the context, making it easier to recall them later.

Task-based learning is another useful method, where students do activities that require them to use new vocabulary in meaningful ways. Gavell (2021) emphasized that task-based learning activity can make students encouraged to concentrate on the meaning and purpose of the language rather than its specific structures. This can include things like finding new words, translating sentences, or studying the language in texts. These activities help students practice both understanding (listening and reading) and producing language (speaking and writing), making vocabulary learning more balanced. Schneegass et al. (2021) further highlight that integrating vocabulary learning into daily activities, such as through mobile applications, can significantly boost engagement and retention. Repetition is also key to remembering vocabulary. By integrating such repetitive practices, students can improve both their vocabulary retention and their ability to use new words effectively in context (Uchihara et al., 2019). Hearing or reading new words regularly helps students understand them better. Spaced learning, where students review vocabulary after a short time, helps them remember words for the long term. Zaidi et al. (2020) explored the use of adaptive forgetting curves in spaced repetition systems, showing that this method can predict how likely a learner is to remember a word, optimizing review intervals for better retention. Motivation is also important because students are more likely to stick with learning if they enjoy it.

Spotify in Enhancing Vocabulary Learning

In today's digital age, listening to music has changed dramatically, with Spotify leading the way in this transformation. Founded on April 23, 2006, by Daniel Ek and Martin Lorentzon, Spotify is a Swedish commercial streaming service offering music, podcasts, and videos. With its extensive library of over 100 million songs and six million podcast titles from record labels and media companies worldwide, Spotify provides digital rights management-protected content across 184 markets. Spotify's recommendation system makes the platform more engaging by suggesting content that matches what users like to listen to, creating a more enjoyable and personalized experience (Anderson et al., 2020). Users can easily search for music by artist, album, or genre, and create, edit, and share playlists, making it a versatile and user-friendly platform. Furthermore, as explored by Harris (2022), Spotify's interactive features, including collaborative playlists and podcast creation tools, empower users to engage more deeply with the platform. Accessible on a

variety of devices, including computers, smartphones, tablets, smart home devices, and digital media players, Spotify is embedded in daily life. Among its many features, the song lyrics option stands out, offering a unique tool for learning English vocabulary through songs, thus blending entertainment with education (Maulidia, 2023). From the definitions, it can be inferred that Spotify is more than just a music streaming service, it is a versatile, user-friendly platform that combines entertainment, personalization, and education. By offering a vast library of content, innovative recommendation and interactive features. Spotify has transformed the way people engage with music and podcasts, making it an essential part of modern digital life.

Incorporating songs into language learning provides a rich and meaningful context for vocabulary acquisition. A study conducted by Butar Butar and Katemba (2023) found that students are more motivated to learn vocabulary when using Spotify. It is because the platform engaging and entertaining nature makes learning more enjoyable and interactive. By embedding new words within the familiar and engaging framework of songs, students can more effectively understand and remember them. This is because song provide a meaningful context for vocabulary, helping students to understand and remember new words more effectively. This context help students to associate words with their meanings and uses, making them easier to recall (Putri & Rustipa, 2023). Meisa (2023) also found this active learning approach helps students to better retain and recall vocabulary. Besides, songs often involve repetition, which aids in memorization. Students can easily remember new vocabulary by listening to and singing along with the lyrics multiple time (Bawawa, 2020). Singing along with songs on Spotify's can help students improve their pronunciation skills (Anjani & Lubis, 2023). Overall, using song in teaching English vocabulary can enhance the learning experience, improve student motivation, and contribute to a more comprehensive understanding of the language.

Benefits and Challenges of Using Music in Language Learning
Music has long been recognized as a powerful tool for language learning, offering a dynamic and engaging way for students to improve their language skills. One of the primary benefits is that music provides authentic language exposure. Zhang et al. (2023) found that singing songs facilitates second-language pronunciation and vocabulary learning, as familiar melodies aid in memorization and articulation. By listening to songs, students are exposed to real-life language used by native speakers in various contexts, which helps them understand both the meaning of words and how they are used in natural, everyday conversations. Music also provides a rich source of cultural context, which aids in deeper language comprehension and fosters an emotional connection to the language, motivating learners to engage with the material. Additionally, Teng (2024) demonstrated that listening to songs contributes to incidental vocabulary learning, with repeated exposure significantly enhancing retention.

Additionally, music enhances vocabulary learning by offering repetition, a critical element for retention. Songs naturally repeat words and phrases, helping students internalize vocabulary through constant exposure. The rhythm and melody of songs also make it easier for learners to remember new words, as they can associate vocabulary with familiar tunes, creating strong memory links. This multisensory experience, where students process both auditory and visual elements of lyrics, further supports vocabulary retention. Furthermore, a study by Kim et al. (2024) revealed that incorporating music as a background accompaniment during study sessions reduces foreign language anxiety and improves learning outcomes. Music also promotes listening skills, which are vital for language learners, as they must identify and understand words in spoken form.

Furthermore, songs are often short, making them a manageable and less overwhelming tool for vocabulary practice compared to other materials.

Despite its benefits, using music for vocabulary learning also presents several challenges. One of the main difficulties is that songs often contain informal language, slang, or idiomatic expressions that may not always be useful or applicable in formal contexts. This can lead to confusion, especially for beginners or learners unfamiliar with cultural references or the nuances of language in music. While music can enhance language learning, it may also introduce informal language and cultural nuances that could confuse learners (Sadiqzade, 2024). Additionally, lyrics in songs may be fast, unclear, or contain incorrect grammar, making it hard for students to fully grasp the meaning of new words or phrases. The speed and complexity of song lyrics can make them difficult to follow, particularly for EFL learners who are still developing their listening comprehension skills.

Another challenge is that the context in which words are used in songs may not always be straightforward, making it harder for students to deduce their meanings. Muhamad & Rahmat (2020) found that the use of abstract or poetic language in songs often complicates learners' understanding of vocabulary. While some songs provide clear context for vocabulary, others may use abstract or poetic language that is difficult for learners to interpret correctly. Furthermore, music-focused vocabulary learning can be limited by the types of vocabulary presented in songs. While many songs use common words and expressions, they may not cover the full range of vocabulary that students need for academic or professional purposes.

METHOD

This study adopted a mixed-methods approach, integrating both quantitative and qualitative strategies to obtain a comprehensive understanding of the research problem. The quantitative method focused on the collection and analysis of numerical data to test hypotheses, measure variables, and systematically validate findings. As noted by Jun et al. (2022), quantitative research involves the formalization of hypotheses and the translation of complex research questions into computable statistical models, allowing for precise and objective interpretation. Accordingly, this method produced measurable outcomes, typically presented through statistical tests, graphs, and charts. In contrast, the qualitative component emphasized descriptive and in-depth exploration of participants' experiences, aiming to capture nuanced insights that could not be quantified. As Ravindran (2019) highlighted, qualitative research prioritizes observation and interpretation over numerical representation, enabling a deeper understanding of individual perceptions and behaviors.

In this study, the quantitative data were collected through surveys and structured questionnaires designed to assess the impact of Spotify on vocabulary acquisition among EFL learners. Complementing this, semi-structured interviews were conducted to explore learners' engagement with the platform, their motivation to acquire new vocabulary, and their overall experiences in using digital media for language learning. The mixed-method approach thus enabled triangulation of data, offering both statistical validation and contextual interpretation. This comprehensive strategy provided robust insights into the role of Spotify in enhancing vocabulary acquisition and contributed meaningful data to the broader discourse on technology integration in language education.

Context and Participants

This research was conducted in the hospitality department students from one private vocational high school in Eastern Jakarta, Indonesia. Participants were chosen based on their field of study in the hospitality program, as students in this area frequently engage in real-life service interactions where English vocabulary plays a crucial role in delivering quality customer experiences. There are two classes with a total of 50 students (21 female students and 29 male students) participating in the study. These participants were considered suitable due to their varied academic backgrounds and frequent engagement with Spotify, which provided meaningful insights into the platform's effectiveness as a tool for vocabulary acquisition.

Research Instrument

This study employed a mixed-methods approach, utilizing both quantitative and qualitative instruments for data collection. For the quantitative component, a structured questionnaire was used. The questionnaire included closed-ended items designed to measure participants' motivation, vocabulary acquisition, frequency of Spotify usage, and their perceived effectiveness of Spotify, adapted from the instrument developed by (Butar Butar & Katemba, 2023). For the qualitative component, semi-structured interviews served as the primary instrument. Semi-structured interviews, widely recognized in contemporary qualitative research, offered both flexibility and a predefined framework, enabling the researchers to explore participants' perspectives, experiences, and behaviors in depth. Semi-structured interviews were selected for their flexibility and effectiveness in maintaining alignment with research objectives while allowing participants to express their experiences openly (Mashuri et al., 2022). Through these interviews, the researchers gathered detailed information regarding participants' experiences using Spotify to enhance their vocabulary skills. The interviews also explored the contexts in which participants engaged with the platform and how it contributed to their vocabulary development.

Data Analysis

This study employed a mixed-methods approach, integrating both quantitative and qualitative techniques for data collection and analysis to achieve a comprehensive understanding of the research problem. For the quantitative component, a structured questionnaire was distributed to participants. The instrument consisted of closed-ended questions and a Likert scale designed to measure various aspects, including frequency of Spotify usage, student motivation, vocabulary acquisition, perceptions of Spotify's effectiveness, and engagement in vocabulary learning through the platform. The quantitative data were analyzed using descriptive statistical methods to identify patterns and trends in participants' responses, thereby providing numerical evidence regarding the effectiveness of Spotify in vocabulary development. For the qualitative component, semi-structured, in-depth interviews were conducted to explore EFL students' experiences and perceptions of using Spotify to enhance their vocabulary. The qualitative data were analyzed using the framework proposed by Miles et al. (2018), which involves three key stages: data reduction, clustering, and interpretation. Data reduction was carried out by transcribing interview recordings, selecting and simplifying relevant information, and discarding unrelated content. The reduced data were then organized thematically, focusing on students' engagement with Spotify and its impact on vocabulary acquisition. In the final stage, the researcher interpreted the clustered data to draw meaningful conclusions about Spotify's role in EFL vocabulary learning.

By systematically integrating both data types, this study ensured methodological rigor and provided a balanced evaluation of the research problem. The combination of numerical evidence and in-depth qualitative insights contributed to a holistic understanding of the effectiveness and perception of Spotify as a digital tool in enhancing vocabulary learning among EFL students.

FINDINGS AND DISCUSSION

The EFL Students' Perceptions on the Use of Spotify in Enhancing Vocabulary Acquisition

To provide a general overview of the data collected, descriptive statistical analyses were first conducted on the variables: Spotify and Vocabulary. These analyses aimed to assess the average tendency (mean), dispersion (standard deviation), and minimum-maximum range of the participants'

Table 1: Descriptive Statistics of Students' Perceptions of Spotify and Their Perceptions of Understanding of Vocabulary

	N	Minimum	Maximum	Mean	Std. Deviation
Spotify	50	23	39	32.56	3.850
Vocabulary	50	8	15	11.26	1.575
Valid N (listwise)	50				

The descriptive statistical analysis was conducted on two variables: Spotify usage and Vocabulary Acquisition, based on data from 50 participants (N = 50). For the Spotify variable, the scores ranged from a minimum of 23 to a maximum of 39, with a mean of 32.56 and a standard deviation of 3.850. This suggests that participants generally had a moderately high level of Spotify usage, with relatively consistent responses as indicated by the low variability. Meanwhile, the Vocabulary scores ranged from 8 to 15, with a mean of 11.26 and a standard deviation of 1.575. These results indicate that the participants had an average vocabulary proficiency level, with scores closely clustered around the mean. Overall, the descriptive statistics provide insight into the central tendency and variability of the two variables, showing that participants' responses were fairly uniform across the dataset.

The Correlation Between the Students' Perceived Use of Spotify and Their Perceived Understanding of Vocabulary Acquisition

To examine the relationship between the perceived use of Spotify and the students' perceived understanding of vocabulary acquisition, a multiple linear regression analysis was performed. Vocabulary was the dependent variable, while Spotify treated as independent predictor.

Table 2: Model Summary of Correlation Between the Students' Perceived Use of Spotify and Their Perceived Understanding of Vocabulary Acquisition

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.726[a]	.527	.517	1.095

a. Predictors: (Constant), Spotify
b. Dependent Variable: Vocabulary

The model shows the relationship between Spotify usage (predictor variable) and perceptions understanding of Vocabulary Acquisition (dependent variable). The results showed a correlation coefficient (R) of 0.726, indicating a strong positive relationship between the two variables. The R Square value was 0.527, which means that 52.7% of the variance in vocabulary scores can be explained by the level of Spotify usage. The Adjusted R Square value was slightly lower at 0.517, which accounts for the number of predictors in the model and provides a more accurate estimate for the population. The standard error of the estimate was 1.095, indicating the average distance between the observed vocabulary scores and the predicted values by the model. These findings suggest that Spotify usage is a substantial predictor of vocabulary perceptions among the participants.

Table 3: ANOVA Table of the Regression Model

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	64.070	1	64.070	53.438	<,001[b]
	Residual	57.550	48	1.199		
	Total	121.620	49			

a. Dependent Variable: Vocabulary
b. Predictors: (Constant), Spotify

The ANOVA test confirms that the overall regression model is statistically significant, $F_{(1, 48)} = 53.438$, $p < .001$. This high F-value, along with a significance level well below the 0.05 threshold, indicates that the use of Spotify significantly contributes to explaining the variance in students' perceptions understanding of vocabulary acquisition.

Table 4: Coefficients of the Regression Model

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	1.590	1.332		1.193	.239
	Spotify	.297	.041	.726	7.310	<,001

a. Dependent Variable: Vocabulary

The coefficients table reveals that the perceptions' of Spotify has a statistically significant and positive relationship with their perceptions' understanding of vocabulary acquisition. The unstandardized coefficient (B = 0.297, p < .001) and standardized Beta value (β = 0.726) indicate that for every one-unit increase in Spotify usage, vocabulary scores increase by approximately 0.297 units. This relationship is strongly supported by a high t-value of 7.310, confirming that Spotify is a significant predictor of vocabulary learning outcomes. The constant term (B = 1.590, p = .239), however, is not statistically significant.

The Benefits of Using Spotify in Acquiring the Vocabulary Qualitatively For EFL Students
Motivation And Interest

One of the most dominant themes identified was the students' intrinsic motivation to engage with English through music. Many participants expressed a natural interest in songs, particularly in English, which drove them to explore and learn unfamiliar vocabulary. This passion for music served as a strong foundation for language acquisition. For example, S1 stated, "Because if I listen to songs on the Spotify app, I can understand English and there are many English songs that I like and I can learn vocabulary from that." Similarly, S2 added, "On Spotify, there are many songs that use foreign languages. It is quite unique to listen to languages that are rarely heard by people." These responses indicate that the enjoyment and emotional connection students feel toward music plays a pivotal role in encouraging them to engage with English content.

Perceived Effectiveness of Spotify

Most students viewed benefit of Spotify is an effective and enjoyable learning tool. They appreciated the platform not only for its music content but also for the opportunity it gave them to reinforce English vocabulary in an informal and enjoyable setting. S6 emphasized: "Spotify, I think is very easy to use and helps me to learn English vocabulary and makes it easier for me to memorize, and it's very effective." S8 noted, "Spotify is a very good application because it helps in practicing English knowledge and vocabulary." The sense of effectiveness was linked to features such as song lyrics, audio input, and the authenticity of language used in music.

Another benefit was found in vocabulary acquisition through repeated exposure to lyrics in Spotify. Many students mentioned encountering unfamiliar words while listening to songs, which sparked their curiosity and prompted them to seek meanings, often through translation or online searches. S3 noted, "When I use Spotify, I like to recognize new vocabulary. Sometimes when I

hear a song on Spotify, I feel a sense of satisfaction." S4 also shared: "Because I can listen to songs while knowing new vocabulary, it can make me learn about vocabulary." Several students cited specific examples of new words they had learned, such as "bittersweet" (S4), "reckless" (S5), and "alone" (S7), demonstrating how real-life content can lead to meaningful language learning.

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Usage Context
Students reported using Spotify in a wide range of settings during study sessions, while doing assignments, in their free time, or even while performing daily activities. This contextual flexibility made vocabulary learning feel less like a chore and more integrated into their everyday lives. For instance, S2 explained, "I usually listen to songs while studying, bathing, sleeping, and when I'm sad almost 24 hours. I really like listening to music and learning English vocabulary while listening to music." S10 shared, "Usually at home, I listen to songs while reading the lyrics, then I listen to how to read the vocabulary."This consistent exposure reinforces learning, allowing students to internalize new vocabulary gradually and in context.

The Challenges of Using Spotify in Learning Vocabulary Faced By EFL Students
Despite the overall positive perception, several challenges were highlighted that could hinder the learning experience. The most common obstacles included: Lack of lyrics on certain songs, which limited comprehension (reported by S2 and S3). Frequent advertisements, especially for non-premium users, which disrupted the learning process (S6, S10). Difficulty in understanding fast-paced lyrics, which made it harder to catch unfamiliar words (S7, S9). As S3 said, "The challenges is that there are many advertisements in the application, and I find it difficult to understand the lyrics if there are no lyrics in the song I am listening to." Although these barriers were acknowledged, most students expressed that the benefits of using Spotify for vocabulary development.

Integration of Quantitative and Qualitative Findings
The integration of results from the regression analysis and thematic qualitative data offers a comprehensive understanding of how Spotify supports vocabulary acquisition among students. The quantitative results indicate that Spotify usage has a significant and positive effect on vocabulary learning. This is supported by a strong correlation ($R = .726$), with 52.7% of the variance in vocabulary scores explained by Spotify usage ($R^2 = .527$, Adjusted $R^2 = .517$). The model is statistically significant overall ($F(1, 48) = 53.438$, $p < .001$).

From the regression analysis, spotify use emerged as a strong and significant predictor of vocabulary acquisition ($\beta = .726$, $p < .001$), suggesting that increased interaction with Spotify is associated with better vocabulary outcomes. This aligns with qualitative feedback such as from

S1, who noted, "I like English songs, and I can learn vocabulary from that." Music interest was a common theme across participants. The qualitative data also elaborated on real learning experiences, revealing additional insights not captured by statistics alone. Several students identified challenges that hindered learning, such as: 1) Missing lyrics for some songs (S2, S3), making understanding more difficult, 2) Interruptions from advertisements on the free version of Spotify (S6, S10), disrupting focus and learning continuity, 3) Fast-paced lyrics (S7, S9) that were hard to follow without written support.

Despite these issues, the regression model's strength (Adjusted R^2 = .517) affirms Spotify's role in supporting vocabulary learning, particularly when learners are motivated and use the tool effectively.In conclusion, the convergence of quantitative and qualitative data underscores that Spotify significantly enhances vocabulary acquisition. While statistical findings confirm its predictive power, student narratives reveal both the benefits and limitations in practical use, offering a well-rounded understanding of its educational potential.

Discussion

Based on the results, it can be concluded that students' vocabulary acquisition through Spotify is largely influenced by how motivated they feel and how effective they perceive the tool to be for their learning. When students are highly motivated and believe that Spotify helps them learn, they are more likely to experience meaningful vocabulary gains. This underscores the importance of not only integrating digital tools like Spotify into language learning but also ensuring that students are encouraged and guided to use them purposefully. Butar Butar and Katemba (2023) found that EFL students had positive perceptions of learning vocabulary by listening to English songs on Spotify, emphasizing the role of intrinsic motivation in enhancing vocabulary development. Similarly, Mallisa and Mbato (2023) highlighted that student who perceived digital platforms like Spotify as effective were more likely to improve their vocabulary, which supports the current study's findings on the significance of perceived effectiveness.

The analysis showed a clear and strong link between students' use of Spotify and their vocabulary learning. In other words, students who had more profitble perceptions of Spotify tended to have better vocabulary skills. Maulidia (2023) similarly found that utilizing Spotify to learn vocabulary through English songs is effective, as students can learn new words from the song lyrics provided. This suggests that how students feel about using Spotify is connected to how much vocabulary they are able to learn. The overall model that tested this relationship proved to be significant, meaning that Spotify does play an important role in shaping students' vocabulary development. The strength of this connection indicates that Spotify is not just a source of entertainment but also a useful educational resource when used intentionally for language exposure. This is consistent with previous findings by Narayan (2020) who showed that students exposed to English songs significantly improved their vocabulary skills compared to those who did not receive the same musical input.

Student interviews revealed several key benefits of using Spotify in vocabulary learning. One of the most common themes was the strong motivation students felt when engaging with English through music. Their enjoyment of songs helped them connect emotionally with the language, making it easier and more exciting to learn new words. Students mentioned how lyrics helped them understand meanings, remember vocabulary, and practice pronunciation. Learning happened naturally as they listened to music they liked, often without feeling like they were studying. This finding is in line with research by Amirdabbaghian (2024), who demonstrated that

listening to English songs significantly enhances undergraduate ESL students' vocabulary retention and pronunciation accuracy. This informal and enjoyable exposure to language contributed greatly to their vocabulary development in ways that traditional methods might not achieve. Therefore, Tampubolon & Sitorus (2023) also suggested that using Spotify playlist applications can be an effective method to teach vocabulary acquisition to students, as it allows them to make their own vocabulary with specific songs.

Despite its advantages, students encountered several barriers, which are missing lyrics for some tracks (S2, S3), which hindered comprehension. Interruptive advertisements (S6, S10) in the free version. Difficulty with fast-paced lyrics (S7, S9), making certain vocabulary hard to catch. Ad interruptions and lack of synced lyrics can disrupt the learning flow and suggest improvements to Spotify's educational functionality. This aligns with Babazade (2024), who noted that digital learning tools embedded with motivational and multimodal features significantly enhanced student focus and vocabulary outcomes in informal learning contexts. Moreover, Ilyas & Kaniadewi (2023) highlighted that while students perceived Spotify positively for pronunciation practice, the lack of lyric synchronization posed a challenge in capturing accurate vocabulary.

Integration of Quantitative and Qualitative Data

The integration of both quantitative and qualitative data in this study provides a comprehensive understanding of how Spotify facilitates vocabulary acquisition among students. The quantitative analysis revealed that motivation ($\beta = 0.742$, $p < .001$) and perceived effectiveness ($\beta = 0.242$, $p = .028$) significantly contribute to vocabulary learning, while engagement ($\beta = –0.074$, $p = .393$) did not show a statistically significant effect.

These findings are supported by students' interview answers. Many said they were naturally motivated and felt that Spotify helped them learn new vocabulary. They enjoyed listening to English songs and found the lyrics useful for understanding and remembering new words. However, some students also mentioned problems, like missing lyrics, ads, and songs that are too fast to understand, which can make it harder to learn vocabulary. This alignment between quantitative and qualitative data underscores the importance of integrating multiple data sources to gain a holistic view of the research problem. As Almalki (2016) notes, integrating quantitative and qualitative data in mixed methods research can provide a more comprehensive understanding of complex phenomena, allowing for the validation and enrichment of findings from different data sources.

Furthermore, the findings of this study are consistent with the study by Sari et al. (2023), who found that regular use of Spotify can improve students' vocabulary acquisition and support overall English language learning. Students reported that Spotify helped them in understanding and remembering new vocabulary through English song lyrics. These insights suggest that while Spotify is an effective tool for vocabulary learning, its impact is maximized when students are motivated and perceive it as effective, and when potential obstacles are addressed to facilitate better engagement and learning outcome.

This study found that motivation is the strongest predictor of vocabulary acquisition through Spotify, while perceived effectiveness also contributes significantly. In contrast, engagement was not a significant factor in the quantitative results, though qualitative data revealed varied forms of engagement, such as looking up lyrics and repeating songs. Students reported learning vocabulary from music they enjoy, highlighting Spotify's appeal as an accessible and enjoyable tool.

However, challenges like missing lyrics, fast-paced songs, and advertisements impacted their learning experience issues not reflected in the statistical data. Limitations include a small, context-specific sample and potential bias in self-reported data. Future studies should involve larger samples and better engagement measures. To enhance Spotify's educational value, teachers should guide its use with structured activities, while platforms could offer features like synchronized lyrics and educational tools. Overall, Spotify shows strong potential as a vocabulary learning aid when used with intention and support.

CONCLUSION

This study found that motivation is the strongest predictor of vocabulary acquisition through Spotify, while perceived effectiveness also contributes significantly. In contrast, engagement was not a significant factor in the quantitative results, though qualitative data revealed varied forms of engagement, such as looking up lyrics and repeating songs. Students reported learning vocabulary from music they enjoy, highlighting Spotify's appeal as an accessible and enjoyable tool. However, challenges like missing lyrics, fast-paced songs, and advertisements impacted their learning experience issues not reflected in the statistical data.

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